

Service Manual

Stereo Integrated Amplifier

Amplifier

40730 **SU-V650**

Color

(S)Silver Type
(K)Black Type



Area

| Color | Area |
|--------|--|
| (S)(K) | (E)Continental Europe. |
| (S)(K) | (Ei)Italy. |
| (S)(K) | (EG)F.R.Germany. |
| (S)(K) | (EB)Belgium. |
| (S)(K) | (EK)United Kingdom. |
| (S)(K) | (EF)France. |
| (S)(K) | (EH)Holland. |
| (S)(K) | (XL)Australia. |
| (S)(K) | (XA)Asia, Latin America, Middle Near East, Africa and Oceania. |
| (S)(K) | (PA)Far East PX. |
| (S)(K) | (PE)European Military. |

SPECIFICATIONS

(DIN 45 500)

■ AMPLIFIER SECTION

20 Hz ~ 20 kHz continuous power output
both channels driven 2 x 90 W (8Ω)

1 kHz continuous power output
both channels driven 2 x 140 W (4Ω)
2 x 100 W (8Ω)

Total harmonic distortion
rated power at 20 Hz ~ 20 kHz 0.002% (8Ω)
rated power at 1 kHz 0.005% (4Ω)
0.0009% (8Ω)
half power at 20 Hz ~ 20 kHz 0.002% (8Ω)
half power at 1 kHz 0.002% (4Ω)
0.0008% (8Ω)

Intermodulation distortion
rated power at 50 Hz:7 kHz = 4:1, SMPTE, 8Ω 0.005%

Power bandwidth
both channels driven, -3dB 5 Hz ~ 50 kHz (8Ω, 0.03%)

Residual hum and noise 0.8 mV

Damping factor 40 (4Ω), 80 (8Ω)

Input sensitivity and impedance
PHONO MM 2.5mV/47 kΩ
MC 170 μV/220 Ω

TUNER, CD, AUX, TAPE 1/DAT 150mV/22 kΩ

TAPE 2/EXT 150mV/22 kΩ

PHONO maximum input voltage (IHF'66 1 kHz, RMS)

MM 160 mV

MC 12 mV

S/N

rated power(4Ω)

PHONO MM 78 dB (IHF'66 : 86 dB)

MC 65 dB (IHF'66 : 68 dB)

TUNER, CD, AUX, TAPE 1/DAT, TAPE 2/EXT 92 dB (IHF'66 : 100 dB)

-26 dB power (4Ω)

PHONO MM 69 dB

MC 65 dB

TUNER, CD, AUX, TAPE 1/DAT, TAPE 2/EXT 70 dB

50 mW power (4Ω)

PHONO MM

MC

TUNER, CD, AUX,

TAPE 1/DAT, TAPE 2/EXT

Frequency response

PHONO

TUNER, CD, AUX,

TAPE 1/DAT, TAPE 2/EXT

Tone controls

BASS

TREBLE

Subsonic filter

Loudness control (volume at -30 dB)

Output voltage

TAPE 1/DAT, TAPE 2/EXT REC OUT

Channel balance, AUX 250 Hz ~ 6,300 Hz

Channel separation, AUX 1 kHz

Headphones output level

and impedance

Load impedance

MAIN or REMOTE

MAIN and REMOTE

■ GENERAL

Power consumption

Power supply

For United Kingdom and Australia

For continental Europe

For others

Dimensions (W x H x D)

Weight

Notes:

1. Specifications are subject to change without notice.

Weight and dimensions are approximate.

2. Total harmonic distortion is measured by the digital

spectrum analyzer (H.P. 3045 system).

62 dB

61 dB

63 dB

RIAA standard curve

± 0.8dB(30 Hz ~ 15 kHz)

3 Hz ~ 100 kHz (-3 dB)

+0, -0.2 dB (20 Hz ~ 20 kHz).

50 Hz, +9 dB

50 Hz, +10 dB ~ -10 dB

20 kHz, +10 dB ~ -10 dB

20 Hz, -6 dB/oct.

50 Hz, +9 dB

150 mV

±1 dB

50dB

635 mV/330 Ω

4 Ω ~ 16 Ω

8 Ω ~ 16 Ω

670 W

240 V

AC 50 Hz/60 Hz,

AC 50 Hz/60 Hz,

110 V/127 V/220 V/240 V

430 x 159 x 363 mm

(16-15/16" x 6-1/4" x 14-1/4")

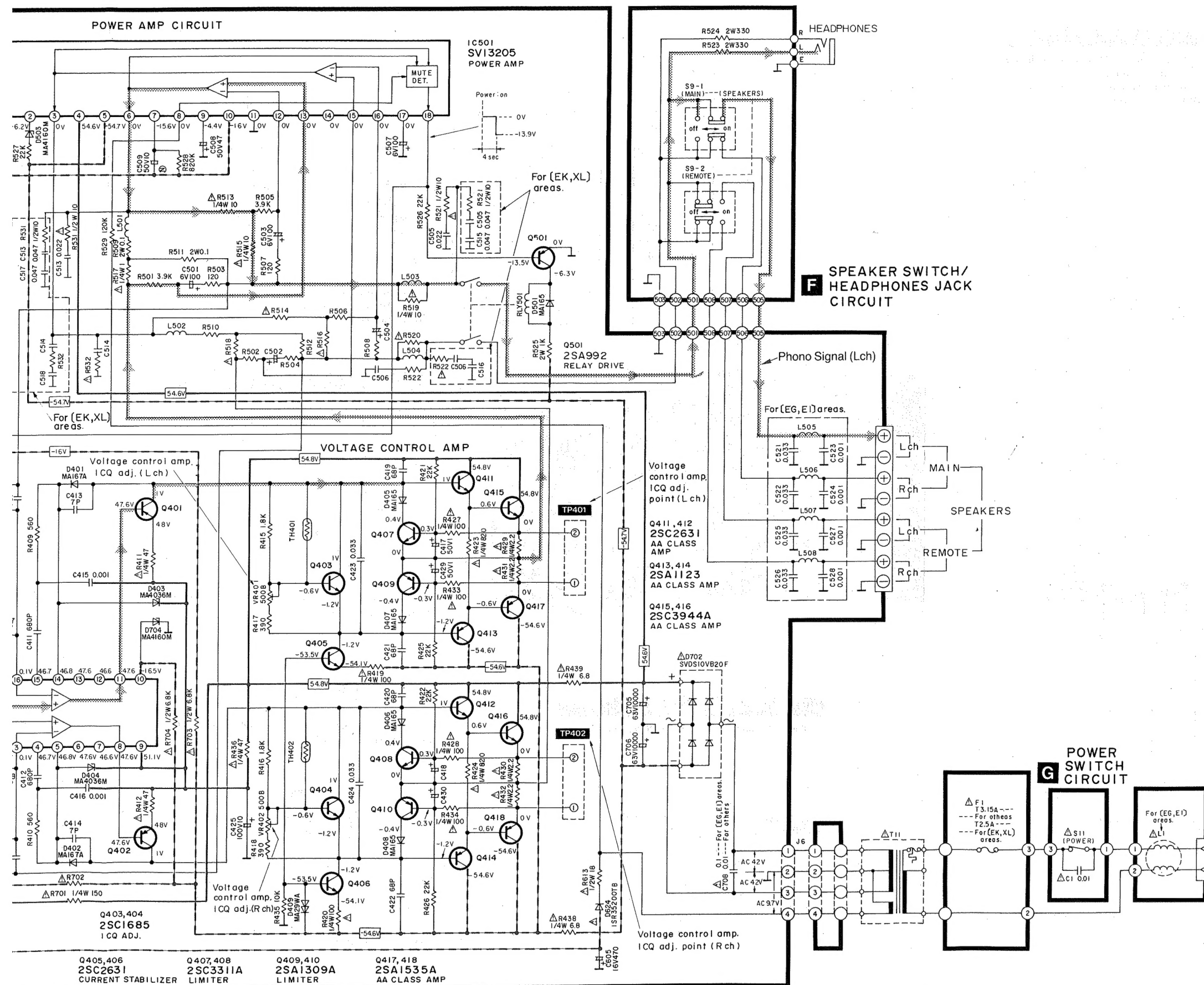
10.1 kg (22.2 lb.)

Technics

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2-chome, Minato-ku, Tokyo 105, Japan

(This schematic diagram may be modified at any time with the development of new technology.)



- Notes:**
- S1-1~S1-6 : Input selector switches.
 - S3-1, S3-2 : Recording output selector switch in "CD" position.
 - S4 : Phono cartridge selector switch in "MM" position.
 - S5 : Compact disc direct-through switch in "off" position.
 - S6 : Loudness switch in "off" position.
 - S7 : Subsonic filter switch in "off" position.
 - S8 : Tone control switch in "off" position.
 - S9-1, S9-2 : Speaker selector switches.
 - S11 : Power switch in "on" position.
 - S12 : Voltage selector switch in "240 V" position.

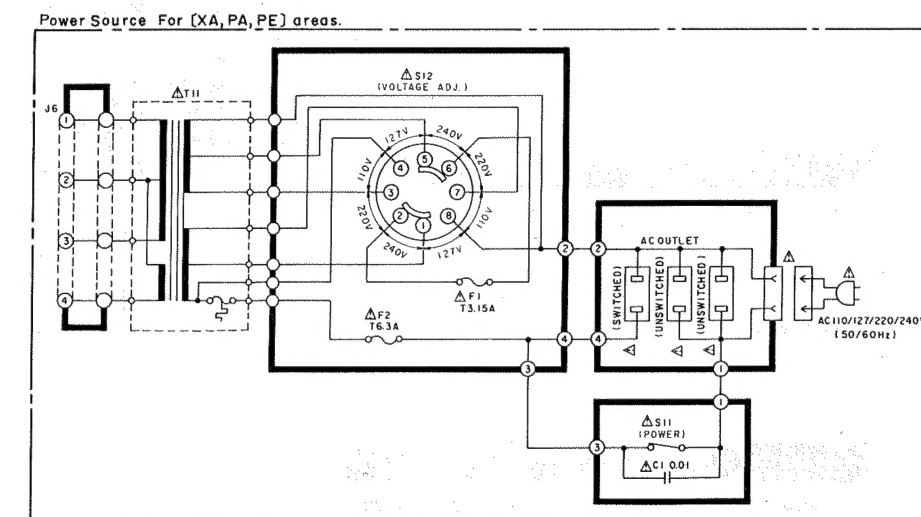
(110 V → 127 V → 220 V → 240 V)
For (XA), (PA) and (PE) areas.

Phono Signal (Lch)
Recording Signal
Positive voltage lines
Negative voltage Lines

Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high- impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

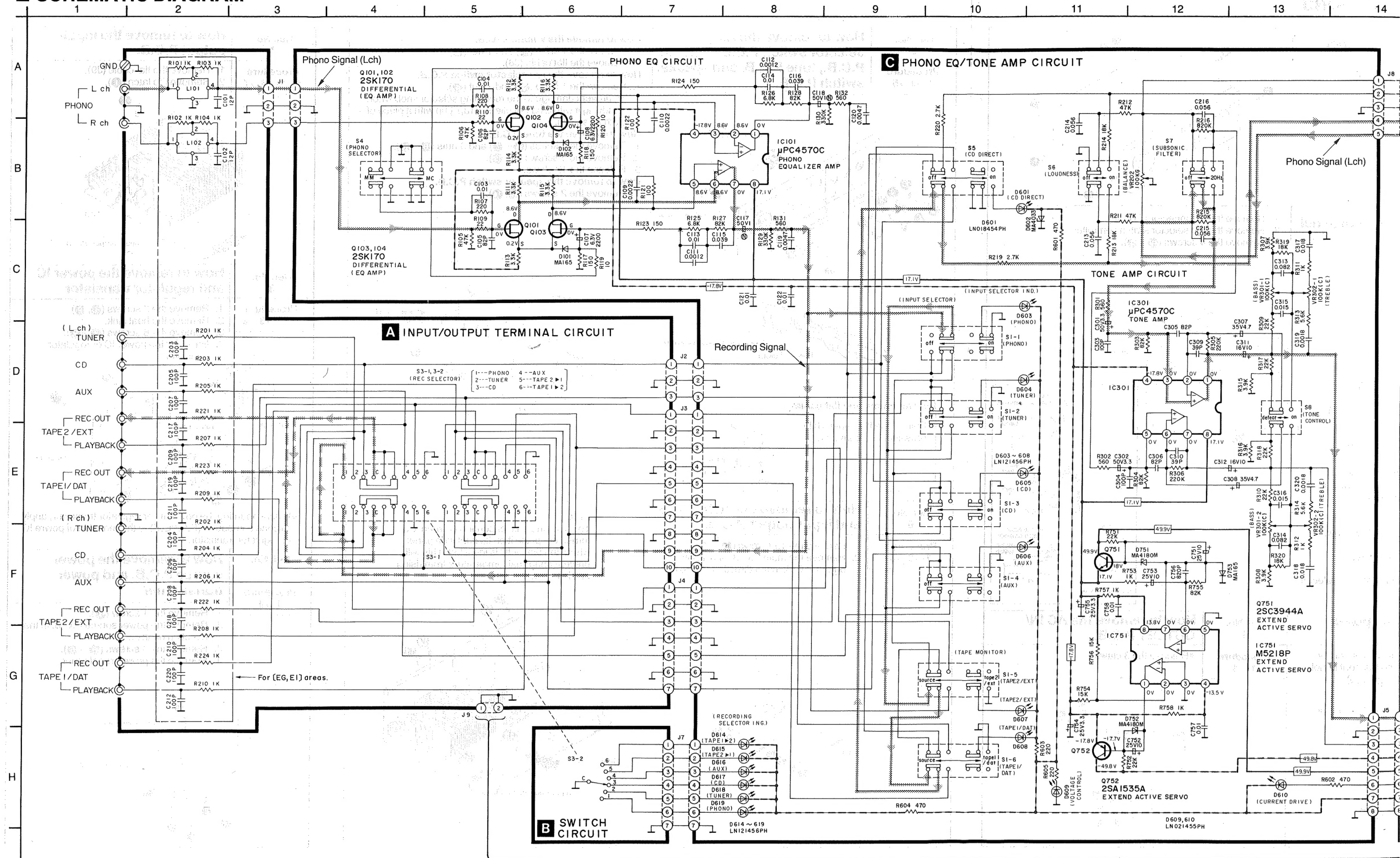
Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

- *Caution!**
- IC and LSI are sensitive to static electricity.
 - Secondary trouble can be prevented by taking care during repair.
 - Cover the parts boxes made of plastics with aluminum foil.
 - Ground the soldering iron.
 - Put a conductive mat on the work table.
 - Do not touch the legs of IC or LSI with the fingers directly.





SCHEMATIC DIAGRAM



Service Manual

Amplifier

SU-V650

166 D

Supplement

40730

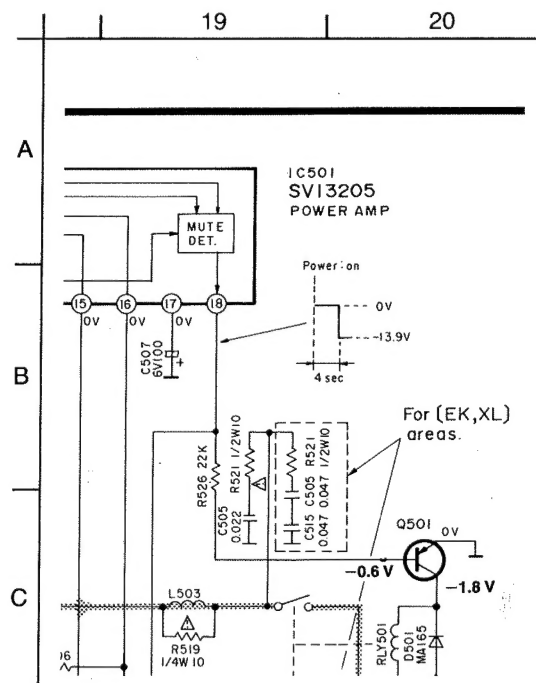
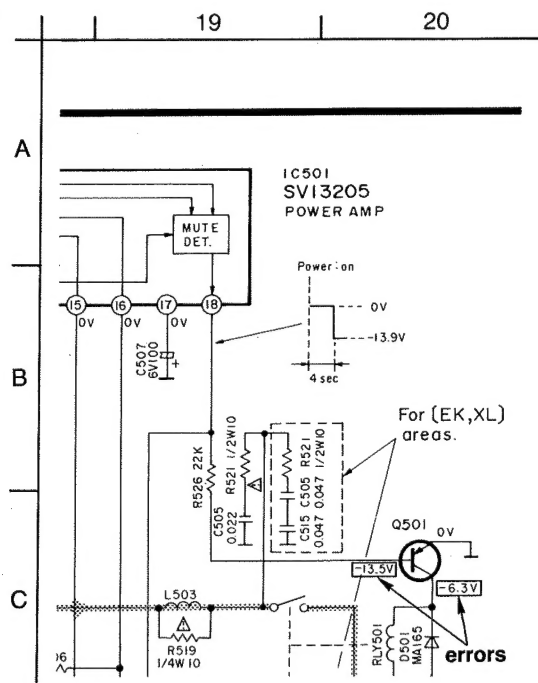
Please file and use this supplement manual together with the Service Manual for Model No. SU-V650, Order No. AD8805088C9.

Note:

- The purpose of this supplement is to correct errors in the "Schematic diagram". Please correct your service manual as follows.

CORRECTION

■ SCHEMATIC DIAGRAM (Page 11 of service manual.)



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Printed in Japan
F9005096